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# EXTENDING SITE-SPECIFIC AUDIENCE EXPERIENCE VIA MULTI-PLATFORM COMMUNICATION DESIGN

**Mr Jerry Watkins**

Queensland University of Technology  
Creative Industries Research and Applications Centre  
jerrywatkins@optusnet.com.au  
+61 7 3105 7353

**Dr Angelina Russo**

Queensland University of Technology  
Creative Industries Research and Applications Centre  
a.russo@qut.com  
+61 7 3105 7402

## ABSTRACT

Across much of the Australian cultural sector, the principal mission of curatorship remains wedded to the production of site-specific physical exhibitions. This mission is entirely understandable when viewed through the tradition of ongoing cultural exhibition in well-populated urban locations, yet sits less comfortably within the wide geographic distribution of the Australian population. Although a growing desire to reach wider audiences via an expanded online presence is evident, such initiatives are tempered by the prohibitive cost of digitising existing collections optimised for physical exhibition. Significant amounts - if not the majority - of compelling cultural content remain inaccessible to communities and the general public.

Multi-Platform Communication Design is a design method which repurposes existing content across multiple communication channels in order to extend an audience experience across multiple target segments. Applied to the cultural institution sector, MPCD takes existing platform- or site-specific artefacts to new, distributed audiences in a cost-effective manner. In so doing, MPCD can extend and increase the audience experience beyond current curatorial and audience expectations. The rationale behind MPCD lies neither in a technological orientation nor blue skies research. Rather, it is firmly focused in providing a tool whereby cultural institutions can reach a wider audience cost-effectively, and communities can not only access content more readily, they may also contribute to the creation of digital collections. This paper acknowledges the exciting potential of synchronous iTV/web broadcast and contributes to the developing multi-platform debate by defining outcomes for both consumers and producers and links this debate to the emerging concept of a "cultural consumer" within this sector.

## KEYWORDS

Communication design, interactivity, cultural institutions.

## 1.0 BACKGROUND

MPCD borrows from a number of methodological predecessors. For example, the technique of designing specific media products to reach multiple audience segments is at the foundation of the marketing communication and advertising industries. But MPCD goes further than media planning in that it uses multiple channels to extend the artefact itself, rather than just promote it. More pertinent to this new method are the various other techniques which have been developed in response to digital convergence and which all - broadly speaking - share an understandable commercial desire to take existing content to new audiences. For example:

- Multi-platform publishing brings a commercial focus to the possibilities of re-purposing magazine print content for online distribution.
- Multichannel broadcasting describes a technology-oriented initiative to rationalise TV broadcast formats as part of digital TV developments.
- Multi-platform design examines mobile/Internet application delivery across desktops, PDAs etc.

Where MPCD differentiates itself from such precedent techniques is in its concern with traditionally site-specific media, such as the museum exhibition or the library collection. A number of Australian cultural institutions currently seek solutions to high-level policy directives to increase audience numbers. To respond to such directives by simply increasing the number of exhibitions and/or programs is not an economic option for many cultural institutions. What is required - and what MPCD can provide - is:

- A cost-effective strategic and technological framework to repurpose existing content to reach greater audiences.
- A mechanism for cultural institutions to share resources across multiple communication platforms.

MPCD does not seek to commit its users to additional significant infrastructure investment, rather, MPCD encourages the designer to use existing channels and

platforms in a more strategic fashion to deliver and extend compelling audience experiences.

## 2.0 EXTENDING AUDIENCE EXPERIENCE

This technique is increasingly familiar to cultural consumers. The ubiquitous Lord of the Rings demonstrates how the contemporary filmgoer is no longer confined to a passive audience consumption role. It is possible to extend and expand the audience experience of the film trilogy through multiple platforms: games, web sites, physical exhibition, DVD and other merchandise. These channels are far more than merchandising “spin-offs” – they allow different audience segments to interact with the Lord of the Rings universe in a way that the cinematic experience alone cannot provide. The interactive video games allow the player to become a character in the universe, meeting a succession of challenges based on the film within a virtual environment. The physical game enables an entirely different form of interaction in the construction of actual models of branded landscape elements (towers, bridges etc.) to support more traditional fantasy role playing scenarios. The current Lord of the Rings exhibition creates an interesting twist for the curatorial community. Rather than designing a digital artefact based on a physical event, the Lord of the Rings physical exhibition is based on the Special Features of the DVD collection. The DVD experience is extended – visitors can dress in the costumes from the films, make short films of their own and purchase merchandise. Unlike the game or film the exhibition provides users with a physical immersive environment where their visit can be an “act” in the wider process of building a community around the film trilogy. Arguably, the amount of digital technology used in the production of Lord of the Rings makes for a relatively smooth extension to digital platforms. However, a stronger example of cultural MPCD can be seen at the very analogue Australia Zoo.

Steve Irwin is one of Australia’s most successful media exports. His Crocodile Hunter series has attracted unprecedented audiences on North America’s National Geographic Channel. The Crocodile Hunter brand brings significant tourist revenue to Australia Zoo, Mr. Irwin’s heavily promoted base in Queensland, Australia. Visitors (many from North America) can meet many of Mr. Irwin’s reptilian co-stars from the TV series, find out more about Mr. and Mrs. Irwin’s various successful conservation initiatives and purchase a wide variety of branded merchandising. Australia Zoo is consistently acknowledged as one of Australia’s best tourist experiences.

The Zoo’s website is located within the Crocodile Hunter portal ([www.crocodilehunter.com.au](http://www.crocodilehunter.com.au)). The Irwin brand firmly family-focused and this is reflected in the design of the online resource, which promotes a sense of community as part of the audience experience. The portal

is much more than a promotional page for the Zoo – it allows the audience to actually become part of the Crocodile Hunter adventure by donating to an appeal, adopting an animal, and learning more about the Irwin family and its wildlife mission. The portal is effective whether the user is thinking of visiting the Zoo, has already visited the Zoo, or has absolutely no likelihood of ever visiting the site-specific attraction. This is a particularly important lesson for the cultural curator, and one that lies embedded in MPCD.

## 3.0 CASE STUDY: THE 200KM CITY

This exhibition was presented by the Museum of Brisbane and Brisbane City Council in 2004 to examine the various debates surrounding the increasing population of south-east Queensland, Australia. The exhibition’s main theme focused on rapid and accelerating migration into the region, coupled with widespread car ownership and an enlarging coastal freeway system - all contributory factors in creating a thin yet continuous population development on the 200km coastal stretch between Noosa and Tweed Heads. The exhibition was specific to the Museum of Brisbane’s central City location and to date there is little likelihood of a touring exhibit. Much of the exhibition’s photographic content was provided by the State Library of Queensland (SLQ), home of the extensive John Oxley collection of historic Queensland images ([www.pictureqld.slq.qld.gov.au](http://www.pictureqld.slq.qld.gov.au)). Working in collaboration with the Museum of Brisbane, SLQ wished to create a web presence to continue the exhibition after its “physical” closing date. The project immediately posed questions that are becoming increasingly familiar to exhibition curators around the world:

- Who is the likely web audience?
- How do audiences create meaning from their experiences?
- Should a website seek to recreate/imitate the physical exhibition?
- How much resource should be committed to the website?
- How do cultural institutions promote audience visitation?

More specifically to the 200km City project, the exhibition’s numerous stakeholders had different perspectives on what purpose an online resource should serve. The Museum team was keen to produce a facsimile of the physical exhibition, with the possible addition of linkages to relevant online forums of political/environmental debate. The State Library wished to encourage searches of the various online information resources which supported the physical exhibition (collections, articles, etc.). The stakeholders took these disparate agendas into a strategic design consultancy process, which forms the first stage of the MPCD method.

### 3.1 MPCD METHOD

The MPCD method (Table 1) has evolved from the Method for Usability in Software Engineering (MUSE) approach developed by Long and Dowell [1]. The attraction of MUSE to complex interactive projects is its insistence on the clear specification of design solutions as the starting point of the design process. This “engineering discipline” has been applied successfully by the authors in commercial multimedia projects, where it is preferred to iterative or waterfall based design methods - both of which can fail to deliver the same creative impetus at the beginning of a project as an engineering method. Although depicted as an end-to-end process, MPCD functions effectively as a modular method.

Due to the unstable technologies involved in the multi-platform development (iTV, DVB, MHP etc.) MPCD does not seek to start the design process with a clear statement of desired performance. Rather, agreement between client and designer upon target audiences and strategic platforms is sufficient to start the process. Although MPCD presents and functions as a complete end-to-end analysis, design and production method, successful implementation assumes that the design team already has substantial cross-media experience, as well as interaction design knowledge and server/database familiarity [see 2].

### 3.2 DOMAIN OVERVIEW

From the client’s perspective, MPCD starts with a consultancy to establish shared domain understanding between client and designer. Within the cultural institutional sphere, the domain of Digital Cultural Communication has been discussed broadly by the authors [3]. The broad agenda of Digital Cultural Communication is concerned with the deployment of convergent digital technologies to achieve greater community representation within institutionalised cultural communication and thereby create a more representative curatorial practice. MPCD contributes to the domain by providing cultural institutions with a method to build multiple channels to multiple audiences.

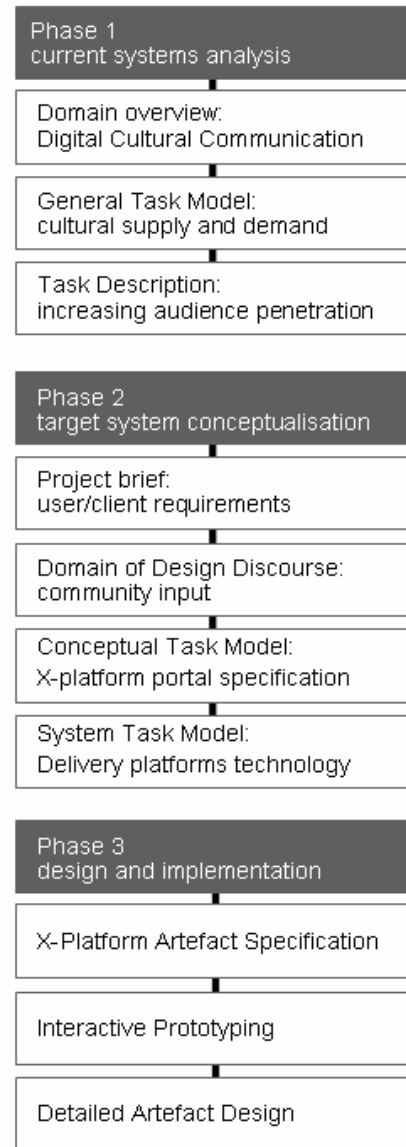
### 3.3 GENERAL TASK MODEL

GTM encourages client and designer to make a detailed analysis of the target cultural market in terms of supply and demand: for example, to which audience segments will an artefact and/or exhibition appeal? What promotion will be necessary to attract these segments?

### 3.4 TASK DESCRIPTION

This describes the desired performance for the project. In this instance, SLQ wishes to extend the audience experience online and increase audience penetration.

Table 1. MPCD method



### 3.5 DOMAIN OF DESIGN DISCOURSE

DoDD encourages client and designer to engage with the community/user group in order to achieve representative and usable design. For the 200km City project, substantial community dialogue has already taken place as part of the physical exhibition’s curatorship, which has informed the MPCD process.

### 3.6 CONCEPTUAL TASK MODEL

The consultation process between the Museum, State Library and system designers concluded with agreement to adopt a MPCD strategy in order to achieve both organisations’ ongoing public missions and to cater for their divergent agendas. A strategic specification listed

the outcomes expected from the MPCD strategy in terms of artefacts and segments:

1. The 200km City physical exhibition.
2. The 200km City online exhibition, a simplified online facsimile of the physical exhibition.
3. Online resources, which display and promote State Library resources related to the physical and online exhibitions.
4. A participatory digital forum to encourage and record comments and observations by online visitors.

This research focuses on the design and production of (3) Online learning resources.

### **3.7 SYSTEM TASK MODEL**

As discussed previously, the MPCD method is not intended as a means to persuade clients to make yet another significant infrastructure investment. Where possible, the designer tries to make existing resources work harder in order to realise the target system and achieve maximum cost-effectiveness. With regard to the case study, the online learning resources site was designed as far as possible to operate purely as an alternative interface to the client's existing server/database architecture, in order to minimise redundancy. The most significant departure from client's operational norms was the construction of a hybrid Flash / HTML site - rather than a pure HTML design - in order to achieve the audience experience specified by CTM (above).

### **3.8 X-PLATFORM INTERACTION MODEL**

XIM encourages the design team to consider how an artefact can present a valid user experience across multiple platforms. It would appear that such consideration is currently lacking in some unexpected places: witness the amount of contemporary broadcast TV production which only transmits at 4:3 ratio, much to the chagrin of widescreen digital TV manufacturers. As internet on TV technology develops, the same criticism can be made of web designers who ignore the potential for their sites to be viewed on anything other than a computer monitor.

### **3.9 INTERACTION PROTOTYPING, TARGET PLATFORMS**

Successful completion of preceding stages will ideally result in Interaction Prototyping being a relatively short and painless process. Unlike the rapid application developer tasked with designing the entire system in client-specified increments, the MPCD designer has a clear idea of the design solution before the design team even begins the project. Hence the Interaction Prototyping

stage can focus on the micro-level of design – so-called “fine-tuning”.

## **4.0 DIGITAL CULTURAL COMMUNICATION AND THE CULTURAL MARKET**

So just what is new media? The question continues to give rise to an assortment of answers from researchers and producers alike, and it is not the intention of this paper to explore this ongoing debate in any detail. However, it is appropriate to make some observations with specific regard to the domain of Digital Cultural Communication. Schuler [4] argued in 1994 for universal access to new technologies in order to support community cohesion, including easy and inexpensive connection to community network services using open standards. Since then, Internet protocols have certainly gone a long way to achieving open access for internet-enabled communities. However, Schuler's strident argument is yet to achieve the same kind of universal access to the emerging higher-bandwidth cross-platform services such as internet on TV, or synchronous web/iTV. High development costs mean that market pressures are bringing closed proprietary middleware systems such as OpenTV to audience set-tops, rather than open MHP-based systems [5]. Schuler's worthy proposal also misses a major factor which continues to elude participants in the cultural communication debate: the difference between access, supply and demand. Simply investing substantial amounts of capital into community internet access has little effect on the cultural 'market' – it is comparable to building a department store and not inviting buyers or sellers.

In Australia, the potential demand for Digital Cultural Communication is high in key segments, notably the secondary education sector. The quality and quantity of the resources available via the country's state library system would grace many curriculum development projects. However, this demand remains largely unrealised: lack of communication between cultural institutions and the education sector means that the significant demand pull that the secondary school audience could exert on cultural institutional “supply” is only beginning to be felt. In Queensland, it is anticipated that a recent formal collaboration between the State Library and Education Queensland will start to realise the substantial potential demand within the school system. Furthermore it is hoped that the MPCD method will be of particular value in the collaboration between these entities.

Within this cultural market metaphor, it should also be acknowledged that demand pull is usually insufficient to allow the market to operate. Supply push is also required to stimulate demand for cultural institutions and their programmes. The site-specific fixation of curatorship has

restricted to some extent the strategic deployment of digital programmes and it is hoped that the MPCD method will demonstrate to curators how multi-platform design can be integrated into the cultural institution's agenda. We need only to look at how internet is changing the hitherto site-specific world of personal banking to appreciate the potential of Digital Cultural Communication.

Marketing theory suggests that we cannot consider access and distribution whilst ignoring the product itself. A detailed examination of online cultural design will be the subject of future research, but it is worth looking briefly at Shedroff's contribution to interaction design [6]. He suggests that we consider the meaning of interactivity by envisioning all experiences as inhabiting a "continuum of interactivity", separating passive traditional media experience (reading, talking) from interactive new media experiences, the latter being distinguished by:

- The amount of control the audience has over tools, pace, or content.
- The amount of choice this control offers.
- The ability to use the tool to be productive or to create.

If we acknowledge Shedroff's continuum of interactivity, the logical realisation for curatorial practitioners is that the online exhibition should not be a facsimile of the physical exhibition, and neither does the addition of a touchscreen kiosk make a collection "digital". Before we leave the market metaphor, it should be noted that the language of supply and demand and indeed any kind of audience orientation is often rejected by the cultural institutional establishment, which is more disposed to a discussion of didactics over design. This is quite understandable in urban clusters which offer substantial audiences for physical collections or exhibitions but – as discussed at the outset of this paper – is a weaker proposition for more distributed cultural constituencies. Furthermore, traditional curatorial viewpoints also might miss the emerging cultural consumer.

#### 4.1 THE CULTURAL CONSUMER

The cultural consumer has the "new literacy" which enables participation in Digital Cultural Communication through interaction with - and even creation of - digital cultural content. Such skills might be the result of specific community-based training, education or general cultural absorption via internet browsing.

Livingstone [7] suggests that the new literacy is enabled by convergent digital technologies and is structured around the ability to access, analyse, evaluate and create messages across a number of contexts. By drawing

communities into the consumption and creation of digital content, cultural institutions can take a proactive role in developing new literacy by enabling direct experience of content production and creating environments for community engagement. For example, communities are working with cultural institutions across regional Australia to capture and represent their cultural identities. When communities partner with cultural institutions to preserve cultural identity, both contribute to the sharing of cultural knowledge and distribution of this knowledge to a wider audience. Cultural institutions can extend the new literacy in this process by providing tools and methods for community co-creation, thus reshaping the process of learning and producing content. The challenge to new media designers to respond to the new literacy is neatly summarised by Shedroff, who proposes that we "learn existing ways of organising and presenting data and information and develop new ones" [8].

Therefore the cultural consumer is not just the traditional museum, gallery or library visitor with a broadband connection: s/he could well be a community member empowered by the new literacy and interested in browsing cultural content in the same way as watching TV. So empowered, the cultural consumer can use multi-platform technologies to experience the collections and/or exhibitions of their choice - just as easily as the TV consumer can change channels – even if the cultural consumer has absolutely no likelihood of ever visiting the site-specific attraction. Curators everywhere should be thanking the Crocodile Hunter.

#### 5.0 MPCD: CONCLUSIONS

In the cultural institution sector, Multi-Platform Communication Design can provide a cost-effective strategy for repurposing content for digital distribution to wider audiences. Providing an end-to-end delivery system for content distribution allows institutions to collaborate, share resources and extend audience interaction across these multiple platforms. As new physical systems draw audiences into a cross-section of content on a particular subject - drawn from a variety of organisations - the distributed network of audiences grows while the institution validates its collection and audience numbers across multiple platforms.

The power of MPCD lies in its ability to design systems which leverage appropriate platforms and existing technologies. Being audience-focused, the systems are optimised to deliver compelling interactive experiences across physical and virtual platforms, extending the user experience by creating new possibilities for knowledge distribution.

MPCD adds value through the design of multiple audience-focused artefacts. While each of these artefacts is an interactive experience in its own right, MPCD

presents a framework where the target audience segments is encouraged to engage with other artefacts on different platforms. If audiences do not engage with particular components, the system itself does not fail but continues to evolve. This produces a dynamic system, responsive to respond to audience feedback and ultimately controlled by the ways in which audiences respond to and interact with it. Audience focus to this extent is still relatively new in the cultural sector as is the notion that audiences can interpret experience and even co-create content with little mediation by governing organisations.

As audiences expect higher levels of interactivity with content, MPCD provides a framework to deliver new experiences and continue extending relationships with existing audiences. By developing a mechanism which responds to successful commercial models, the cultural sector can successfully establish distributed systems which both deliver wider audiences and expand the knowledge and input of existing audiences.

This paper has introduced the Multi-Platform Communication Design method as a potential curatorial tool within the domain of Digital Cultural Communication. The research has used commercial examples to examine the potential for audience extension via multi-platform communication, and has adopted market-oriented terminology to suggest possible strategies for cultural institutions tasked with increasing their own audiences.

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#### **WEB RESOURCES**

The 200km City: From Noosa to the Tweed  
<http://www.200kmcity.slq.qld.gov.au>

The 200km City: State Library Resource  
<http://www.200kmcity.slq.qld.gov.au/resources>

Australia Zoo <http://www.crocodilehunter.com.au>

State Library of Queensland, John Oxley collection  
<http://www.pictureqld.slq.qld.gov.au>